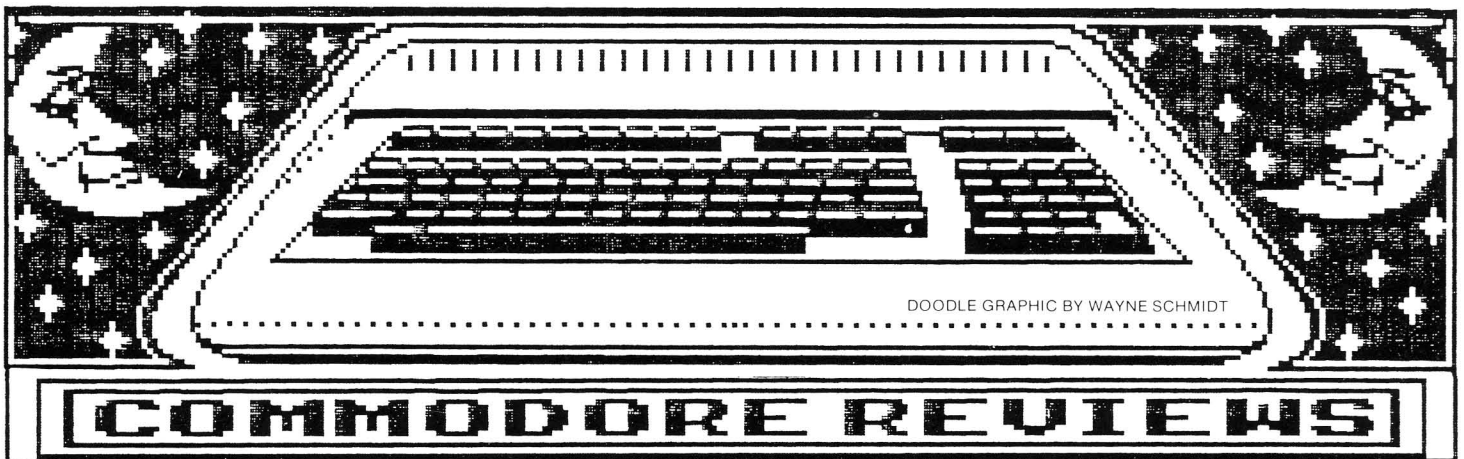


The MIDNITE

SOFTWARE GAZETTE

Now Monthly!

MIDNITE PRESS NOTES



COMMODORE REVIEWS

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Word Processor: A full-featured menu-driven word processor including: very fast file commands, screen editing, text locating and full control over margins, spacing, paging, indentation, and justification. "... well done and highly functional... Provides an excellent alternative to the high priced word processors... this is an excellent buy. Highly recommended." —Midnite Software Gazette. "Provides good basic features." —Compute's Gazette.

Copycalc: An electronic spreadsheet. Turns your Commodore into a visible balance sheet; includes screen editor. "Excellent program for budgeting, estimating, or any math-oriented use... well worth the money. Highly recommended." —Midnite Software Gazette.

Also included: **ReportGen, ReportMerge** (interface W/P with Database to create form letters, statements, invoices, mailing labels, other reports.); **Baseball Statistician** (compiles batting statistics for a baseball league); several W/P utilities, including **Index** (indexes W/P's text files); several Database utilities, including **DBmerge** (facilitates multi-file database applications.), and **DBStat** (analyzes D/B files); a programming utility, **ASCII**, which converts text files (program listings) into program files; also **Checkbook; Inventory; Paper Route; Loan Analysis; Breakeven Analysis; Depreciation; Labeler; File Copier;** more.

Versions of the package are available for every Commodore computer having a minimum of 10K RAM. All programs will support tape, disk, and printer. Price includes documentation and shipping; Calif. residents add 6%. Add \$3 for credit card, C.O.D., 8050 disk, or tape orders [disk only for Plus4™ and 16™]. No personal checks from outside USA. This ad is the catalog; a sampling of program output is available for \$2.

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CHANGES AT MIDNITE

Welcome to issue 24 of the Midnite Software Gazette. By now you should have noticed some differences, and we hope you will approve them.

Beginning with this issue, Midnite has a new two-column format that we hope you will find easier to read. Experts in publishing have suggested this format for years, but we've simply been unwilling to go through the hassles involved in doing two-column printouts from Commodore word processors. Word Perfect, however, on our Corona PC-compatible, makes two-column outputs easy and fast.

This issue should also reach you more quickly and reliably, thanks to our new monthly publishing schedule and first class postage. You should also find it quicker to read, thanks to a briefer style, and reduction of material reprinted from other sources. Our cover price has also been reduced, to reflect our new format, and this may make it easier for folks to pick up a copy at dealers.

Please also notice our new mailing address for the editorial office:

Midnite Software, Inc.
P.O. Box 6100
Macomb, IL 61455-6100

These changes reflect our wish to more carefully aim Midnite at continuing needs in the Commodore marketplace, while simultaneously making it easier and faster to write, edit and publish. (Much though we love bringing Midnite to you, it still doesn't provide as good a return as we could obtain from other projects, so changes are needed.)

One other consequence of the new format and changes in our personal lives (see column 2) is that we will only be able to reply to most questions and correspondence through these pages. Therefore, it is no longer necessary to enclose a stamped self-addressed reply envelope when writing us, and by the time you read this, it will be very difficult to reach our editorial offices by phone except by leaving messages on our answering machine, and even then we will be unable to return most calls.

PERSONAL CHANGES

Beginning last summer, it became obvious to me that being well-known in the Commodore world wasn't helping me. Constant calls and letters asking for help didn't contribute to the family income, and their burden, along with that of writing the Midnite and a church computer newsletter, allowed others to develop several book ideas before us. Yet, we still had almost no time to ourselves. Various attempts to convince those who begged for computer help to pay for it failed, convincing me that they didn't really value my aid.

Our work was also both attacked and ignored this year, by persons and groups that should have known better. I've tried to develop a thick skin about such things and let everything roll away like water off a duck, but ours is still too much a volunteer enterprise to take ingratitude happily. The adversity served primarily to prove how fleeting fame can be.

As a result, we've decided to forego what's left of our personal notoriety, and fulfill a long-time promise to complete another advanced degree and find permanent employment. Therefore, I am returning to graduate school for a computer science degree beginning this month, while I ponder what God has in mind for us. That way, whatever follows, I will have a proper education in the field which has been so much more than a hobby for me. Fortunately, Western Illinois University has offered me an instructorship at a good salary during my studies.

Since I must put my teaching and studies first next year, I can no longer provide free help. If you need assistance, I will still gladly help you, but only after you have paid for it at the rate of \$15 per half-hour.

I'm sad to have to write this, since so many of you do appreciate our efforts, have helped us generously, and defended us when necessary. Even so, you deserve the truth. As always, through all changes, we're still eager to hear from our computer friends, even when we can't always reply promptly. You can be sure we still read every letter, and think of you often.

--Jim Strasma

Excerpts from a talk by Pete Baccar of Commodore at a CIPUG meeting, March 8, 1985, with added thoughts from JS:

The star of 1985--the C-128:

Named for its 128K of RAM, the C-128 is three computers in one case, a 6510, a 280, and a new 8502 HMOS processor. The 8502 adds extra I/O ports and has more pins than the other chips. In 40 column modes, the system will operate at 1 MH, switching to 2 MH in 80 column mode.

The 128 also has built-in CP/M 3.0, able to use Wordstar and other CP/M-80 programs as is, in the popular Kaypro format. Pete reports Commodore went with CP/M instead of MS-DOS because it has a lot of software, and is cheaper.

In 64 mode, the 128 is totally 64-compatible. In 128 mode, you have a choice of 40 or 80 columns, via a switch. (The 128's added keys and extra 64K of memory are simply ignored by the 64 mode.)

Even cartridges, 80 column cards, and IEEE-488 adapters work normally in 64 mode, because they are the first thing looked for at power-up, followed by an auto-boot diskette.

The 128 has the same ports as the 64, including a functional cassette, an 8 pin video connector, and a TV modulator. It still shows the graphic characters on its keys, has several added keys, and a RESET button. Custom software can use the new numeric keypad as extra function keys. There is also a D connector for RGB.

When using RGB, you'll also have to run the composite signal into your monitor for sound. The RGB monitor starts out with purple text, and can display 640 X 200 pixel monochrome graphics, in the 80 column mode, but not multiple colors.

1571 Disk

The new 1571 disk has more ventilation, and doesn't thump like the 1541. In 64 mode, it runs at 1541 speed, with the usual capacity. In 128 mode, it provides 4 times the 1541 speed, and is double-sided.

The speedup technique used is the familiar one that first appeared in 4 minute backup. In CP/M, you may expect even higher speed and capacity.

Pete expects disk jockies to access the back side of 1571 diskettes from 64 mode, but it can't read the back sides of diskettes users have cut extra notches into and double-sided on their own, except by turning them over as before.

BASIC 7.0

The usual BASIC abbreviations work in 64 mode, but there is a new set in 128 mode, which uses Basic 7. It includes all commands ever used in any Commodore machine, plus new sprite and sound commands, and an enhanced monitor. In 128 mode, most jump vectors remain unchanged, but all other ROM calls are different than in the 64. Of the 128K of total memory, 120K is free for use by BASIC--more than on the IBM-PC. It has 64K for programs and 64K for variables. The whole 128K will also be usable from CP/M. Users may add still more memory as a RAM disk, up to at least 512K.

The added memory will act like an extremely fast disk drive, with added commands for easy use from BASIC. Despite apparent similarities, the C-128 is not software-compatible with the B-128, but it is usable with the 1541, even in CP/M. A 1572 dual drive may appear later.

1902 Monitor

The video on the 128 has two modes: 80 columns RGBI (Red-Green-Blue Monitor, plus an I for Intensity). The RGB allows the 128 to display 80 columns in color, the I allows it to do so in 16 colors, plus there is hi-res 40 column composite color. In 80 column mode, you lose sprites, but keep SID sound, because the 128 uses two separate video chips.

Commodore will also offer a new 1902 monitor that is switchable between composite and RGBI. It can be used with most everything from a VIC to an IBM PC with a color card. In the 128, the Escape X command switches the composite and RGB screens, retaining the current display on the former screen. This allows you to leave a note to yourself on the unused screen. Only the RGB screen has 80 columns, and only the composite screen has high resolution.

One other obvious change in the 128 is that its Power supply is repairable, with a visible fuse. However, it has a different pinout from the 64, so it won't be a straight upgrade for existing units.

The 128 will be marketed by mass merchandisers like the 64, beginning this summer, although Commodore is seeking regular dealers for obvious reasons Pete couldn't discuss.

The lap computer:

The new LCD lap computer was also shown. It has some excellent features, and has excited a good deal of favorable comment, but won't be available as quickly as the 128, so we'll discuss it next issue.

The Rest of the Family

Pete reports the 64 is back in production after a widely publicized two week layoff last winter. Despite slow sales, the 16 & Plus/4 are still being marketed, and some new products are being developed for them, because the 16 sells well in Europe. The SX-64 is still being sold, and will be put back into production if need be. Commodore lost a good bit of money last quarter, but I am assured that has turned around since.

As Pete sees it, the 64 is a home computer, the 128 is a step-up into small business, and a much more expensive and businesslike machine will be eventually announced, making Commodore a 3 tier company with 3 primary products. I've only heard of two 64 owners anywhere who don't want a 128, (in both cases because they mistakenly think the unannounced Amiga will be a cheap home machine available any day now.) 128 sales should be brisk at the \$300 list price, less a widely-offered \$30 user group rebate.

Other Commodore News:

Finally, laugh if I'm wrong, but when Commodore stock dipped below \$9 a share, from over \$60, I bought a bit. I believe the loss of Jack Tramiel improved the company. Other investors and industry pundits disagree. It will be worth the risk to see who's right. Go team go!

Competitor Notes

Apple is still profitable, but troubled, with lots of folks headed for the door. Given final failure of the Lisa (a.k.a. Mac XL), general realization that the II is now only tolerated in house, and Mac still being peddled only for use in corporate offices where it isn't wanted, it might be a good time to sell out to AT&T.

Atari pulled out of the summer CES. They did, however, attend Comdex, wooing computer stores rather than mass merchants. Perhaps all the mass merchants have already rejected the ST. Unfortunately, boss Jack Tramiel made enemies of most independent dealers during his days at Commodore, so he'll have little success there. That leaves only the less competitive world market at first. Contrary to most observers, I still don't expect him to make it, and if he does, the real winner looks like Taiwan. As for the 800 series, it still isn't selling well, even at \$99.

The biggest PC news is still the AT. It's no longer on allocation, and the first clones have been announced. Despite endless rumors, no PC II has appeared, nor a replacement for jr.

IBM's ill-advised announcement that jr production has stopped doesn't mean there aren't still plenty around to be sold.

Those who find 640K of RAM inadequate have a new 4 Meg alternative. Intel's "Above-Board" is also supported by major software vendors. Rumored new versions of DOS may also offer larger memories.

The new Tandy 200 lap computer is intentionally much simpler and cheaper than the state of the art DG-1 from Data General. I like its larger screen and RAM, the alarm, and Multiplan, but still prefer my Tandy 100, especially at half the cost. Elsewhere, Tandy continues to focus on PC-compatibility, and is beginning to prosper again.

Elsewhere, shakeouts continue, but signs of bottoming out are beginning to appear. The micro revolution continues, with its promise of better days for those who survive.

Q: I would be interested in your view of copying commercial software for use in college. I teach Data Processing at Mid-Plains Community College, where I am department head. My reasons for copying software [greatly abbreviated.] are as follows:

1. To copy software is emotionally charged. It is creative and commits one to the software at a different level than merely to buy it. This intensity adds a dimension to the classroom presentation. Copying is part of the creative process of developing software. To buy software to use in teaching is to degrade oneself and one's teaching.
2. Software is written to be copied. To copy software is to fulfill one of its purposes. One who assumes the responsibility to teach has the right to the means — that is, to use the software. The opposite view is ethically absurd, as it leads to the belief that one can control knowledge.
3. The price of software is stacked against the classroom. The difference between buying and studying a machine ought to be obvious. I think my position is consistent with the rights of the poor to receive an education competitive with that of the rich.

I would enjoy hearing from you. My commitment to ethics is real and abiding.

Frank Freeman
2601 West "E" Street
North Platte, NE 69101

A: Although many college teachers and students feel very free to illegally copy everything in sight, I consider this theft, and feel strongly that it would be morally better for schools not to teach computing at all than to also teach students by our deeds that theft is OK.

To give you the benefit of the doubt, here are my responses to your arguments:

1. Software pirates are often clever programmers, who claim they could easily write great programs themselves. Yet most don't. Too-easy access to programs removes the need for creativity.
2. Those who teach do have the right to needed tools. But your claim is not on software vendors, but rather on school administrators, who have traditionally budgeted money only for hardware. When such people think about software at all, they assume students can write whatever is needed.
One hopeful sign is a move by textbook vendors to offer software at no charge to go with textbooks. This solves the problem nicely, because everyone seems to agree on the need to pay for textbooks.
3. In today's buyers' market, a vendor with reasonable terms can usually be located. For example, Commodore explicitly allows schools to network some of its programs on up to four machines at once in schools, and permits schools to copy manuals for that purpose. Similarly, the makers of Word Perfect for the IBM sell a school edition for \$75, instead of the usual \$495 price.

Even better are the new freely-exchangeable demo versions of major commercial programs. Microsoft Word and Framework are two major programs for the PC now available in demo versions that may be freely exchanged by schools.

Best of all for this purpose are the "freeware" programs. You may copy such programs for all your students. You and they owe the author a donation only if you keep and use the software.

I hope this gives you some moral alternatives. If not, be prepared to argue your views in court. All it would take for your school to find itself in a real mess is for one irate student to write a letter to a vendor. That could, at the very least, cost you your job. Good luck.

C. ITOH PRINTER REPAIR WOES

Here's a good news/bad news story for you: The C. Itoh "Printmaster" F10-55 daisywheel printer, which has served Midnite well the past two years suddenly refused to communicate over its RS232 port last November. The self-test worked perfectly, but it refused to print anything else. Since an area dealer, Main Street Computer Company in Decatur IL, is a service center for C. Itoh, we immediately took it in for repair. They sent the unit back to C. Itoh in California for a new main board in early December.

THE FORGETTABLE Y-10

The first good news is that Main Street loaned us one of the new \$600 C. Itoh "Y-10" daisywheels. Unfortunately, its control codes don't match those of the rest of C. Itoh's line, nor do they match those of any of 50 other printers we tried. Further, its super-easy-to-use drop in daisy wheel kept printing a symbol that looked like a long quotes mark in place of another character several times a line, unpredictably.

BETTER LUCK WITH A "STARWRITER"

We limped along until early February, when a new C. Itoh "Starwriter" F10-40 was returned to Main Street after awaiting repair for 6 months. At this point, Main Street graciously traded loaners with us, and Midnite 23 was printed without incident on that machine, which has the slight advantage of being quieter than the "Printmaster" when not printing (no fan). However, C. Itoh printers are still being shipped without an easily-installed \$5 buffer memory chip (the same 6116 used in VIC memory cartridges), so the net

printing speed is much slower (because the buffer allows the printer to keep going while Paperclip loads the next file). It took 5 hours to print Midnite 23.

SIX MONTHS LATER

The really bad news is that it has, at this writing, been over six months since our C. Itoh printer died, and we just last week finally received the repaired unit back from C. Itoh--still dead, with the same symptoms it had in November! Absolutely incredible! Given that it also took 6 months to repair the loaner we're using, I wonder if we'll ever see our printer working again.

MAIN STREET 10, C. ITOH 0

I'm left in a quandary. Main Street has proved itself to be a fine dealer, and when they work, C. Itoh printers are among the best performers available at any price. But if you can't expect service within a week of even a major failure, they are simply not appropriate for serious use. Therefore, I no longer recommend C. Itoh products, despite my great enthusiasm for them when they work, and my fondness for area dealers. If you must buy a C. Itoh product, do so only from a dealer willing to guarantee in writing an immediate repair or replacement in event of a hardware problem. You cannot count on C. Itoh itself for anything.

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Book Reviews

BEST OF THE TORPET

edited by Bruce Beach. 1984. 314p.
Paperback for all Commodore models from Copp Clark Pitman Ltd., Toronto ONT.

Compared to Beach's earlier effort (The Whole PET Catalog, published for us), Best of the TorPET is a vast improvement physically. As for content, it includes a good variety of information that could be useful, organized so one can probably find it when needed, and easily Xerox a needed article without a lot of unrelated garbage. The quality of the information is generally good, except for the cartoons, most of which are excellent. In my biased opinion, the reprinted Midnite was the soul of the TorPET, and that is missing. -JS

C-BIMS: Cassette-Based Information Management System for the PET

by Gary Greenberg. 210p. 1983.
\$11 paperback cassette file manual for the PET from Tab Books, Blue Ridge Summit PA.

This is a book by a long-time Midnite reader that I should have reviewed long ago, when some folks still used CBM and PET models for serious purposes without a disk drive. The book would be of real value to its intended audience, but that audience is small and shrinking. Those still dedicated to serious use of cassettes on the PET/CBM should look at it. -JS

COMMODORE 64 DATA FILE PROGRAMMING

by Glenn Fisher et al. 499p. 1985.
\$15 paperback file manual for the 64 from Wiley Press, New York NY.

REVIEW #1: This is a book I would like to have written last year. The authors, long-time Midnite readers, and familiar with related books have done a fine job, even covering cassette data files. Though the

book omits the new disk commands of the Plus/4, 16, and C-128 in its main body, it does cover them in an appendix, making the book at least somewhat helpful to most anyone with a Commodore disk drive. The many review questions might also make it useful in a class setting, although it doesn't go deep enough into system design or data-handling algorithms to be a college text. If you understood our revised 1541 manual (tan cover), and don't use a cassette, you may not need this volume, but many people will still find it helpful. -JS

REVIEW #2: This book is designed for those fairly fluent with Basic, to help you teach yourself to program data files using Commodore Basic. It reviews basic statements, and tells the reader how to make programs more readable and better organized. Then it covers data and error checking routines, tape files, disk files, and how to design your own file. The 5 appendices contain ASCII codes, Basic keywords and abbreviations, error messages, disk file commands and an explanation of differences between the PET and the 64. -Steve McNamara

COMMODORE 64 GRAPHICS AND SOUND PROGRAMMING

by Stan Krute.
Paperback for the 64 from Tab Books, Box 40, Blue Ridge Summit PA 17214

The 64 is one of the best home computers for graphics and sound, but in PET Basic it is very difficult to sing or even move a blip. That's why books like this complete tutorial on using the VIC and SID chips are so necessary. You start with simple sprites, then advance to multicolor sprites, custom character definitions, and bit-mapped graphics. Next comes multicolor characters, sprite overlays, simple sounds and joystick control. Finally, you study

complex sounds and graphics. All sample programs are in Basic and fully explained. There are reference tables for screen and color memory, and coding forms for designing sprites or characters. Very complete. -Steve McNamara

1541 USER'S GUIDE

by Gerald Neufeld. 413p. 1985. Paperback disk manual from Brady Press (though labeled Datamost), Bowie MD.

The question posed by this book is whether it's better to read a 96 page manual that covers everything and almost always accurately, but very quickly, or read a manual in excess of 400 pages that covers more related topics, and covers them in great detail, but misses a few of the basics, and occasionally has lapses of accuracy. For instance, Neufeld correctly tells you that VIC owners don't have to use the UI- command when using the 1541, but he fails to mention that they might wish to anyway to gain the 25% speed increase it provides. Neufeld also entirely ignores the new disk commands used by the Plus/4, 16, and C-128. More importantly, Neufeld's book fails to recognize the peril in omitting the drive number when using the savewith-replace command, and I take issue with some of his reported DOS "bugs".

On the other hand, I appreciated Neufeld's extended coverage of relative files, including indexing techniques, binary searches, and the like. There are also several useful added programs for such chores as aligning a drive and recovering a scratched file. He also corrected one lingering bug in my manual--the requirement that the byte parameter be specified in RECORD# commands in BASIC 2.

Since I get no royalties from Commodore's revised 1541 User's Guide, I feel comfortable suggesting you read it first (look for the tan cover.) Then read Neufeld's book when you need more help, relying on the official manual when the two disagree. -JS

LET'S LEARN BASIC

by Ben Schneiderman.

\$9 Basic programming manual for ages 8-14 from Little, Brown, Boston MA.

Let's Learn Basic covers the fundamentals of programming in Basic. Each chapter starts with a general overview, introduces new terms, continues with specific examples, and explains why and how the routines are used. At the end of each chapter is a series of exercises. Answers for most are at the end of the book. My daughter tried this book and found it easier to use than the other program manuals she has tried. She liked the structured format, and especially appreciated the author's explanations of why each command is used and how it performs its function. Let's Learn Basic is strongly recommended as an introduction to the fundamentals of good Basic programming techniques for adults as well as children. -Ron Dale

PROGRAMMING THE COMMODORE 64

by Raeto West. 609p. 1985.

\$20 paperback reference guide to the 64 from Compute!Books, Greensboro NC.

This is the only book a skilled user needs to cover the Commodore 64's many features and abilities. Compared to West's earlier volume for the CBM, Programming the 64 is more beginner-oriented, which I regret, but still manages to cover more advanced material than any other available book. I especially appreciated its detailed coverage of the 64's hardware, a topic not well covered elsewhere. Although I will miss the extreme detail of the CBM version in covering such topics as how particular BASIC commands are interpreted, I appreciate many of the added features of the new volume. As soon as it arrived, I got rid of most of my other books for the 64, and I would estimate West's book contains the answers to over half the questions I receive in my "Commodore Clinic" for Run magazine. If you could only have one book for the 64, this is the one. Highly recommended. -JS

THE SECOND BOOK OF MACHINE LANGUAGE

by Richard Mansfield.

Paperback for all 6502 computers from Compute! Publications, Box 5406, Greensboro NC 27403

This followup to Mansfield's first book uses a symbolic assembler that is really advanced. This book isn't especially for the 64, but is very detailed on writing machine language programs. If you are looking for a book that teaches about graphics and the use of the SID chip, you might want a different book, but if you just want to learn machine language, this appears to be pretty good. -Doug Speta

SERIOUS PROGRAMMING FOR THE COMMODORE 64

\$10 book for the 64 from Tab Books, Blue Ridge Summit PA 17214

This book was written to help the programmer write more professional programs. The book stresses some tried and true programming concepts which are best used when learned early. The first couple of chapters are devoted to making your programs "user friendly" (i.e., "idiot proof"). Next come chapters on hardware and software, system documentation and program design. It includes discussions of data entry, validation and error-testing. One particularly good chapter is on program control through the use of menus. The last few chapters touch on the mysteries of program chaining, file handling and using your printer. The chapter on file handling is particularly informative. All in all a good book, that gives you a better understanding of the importance of designing programs and complete systems, for easier usability, and modification by the programmer. -Steve McNamara

1001 THINGS TO DO WITH YOUR COMMODORE 64

by Mark Sawusch and Tan Summers.

\$10 book for the 64 from Tab Books, Blue Ridge Summit PA 17214.

Have you ever had a friend say, "Well, what do you DO with your computer?" If you're having trouble coming up with a good answer, this book may be a good investment. It has hundreds of excellent ideas you can design a program around. It includes technical and scientific applications,

education, games and personal finance. Nearly every subject includes a complete program listing, and several pages contain ideas to spark the imagination. There are even chapters on controlling household devices and artificial intelligence. -Steve McNamara

WHAT'S REALLY INSIDE THE 64,

by Milton Bathurst. 1983. 242p.

\$39 paperback of commented pseudo-source code and cross assembly of Basic and the Kernal for the 64 from Schnedler Systems.

As those who've studied the official source code for Commodore computers already know, it lacks in several areas, particularly in its documentation of Basic. Although its labels are correct, many sections are otherwise completely undocumented. The Abacus book, Anatomy of the 64 is a partial solution. It adds useful comments to many of the previously undocumented lines, at the price of having labels invented by an unassembler, and omitting all the equates. What's Really Inside the 64 goes two big steps further, by including a full set of commented equates, and by including a full cross-reference of each time a memory location is referenced from another address. It also has a fuller set of line comments than the Abacus book, although not its other discussion chapters.

My only reservation about this useful text is its cost. Since it is imported, the only way to reduce costs would be to reprint here. But even at its current price, serious students of the 64's Basic and Operating System ROMs will want a copy. Together with Leemon's Mapping the 64, What's Really Inside the Commodore 64 gives you everything you need to know about your 64's ROMs except their official labels. Recommended to serious machine language programmers. -JS

Data managers and Mail lists

HOME PAK, by Russ Wetmore.

\$50 diskette for the 64.

Integrated text editor/filer/terminal from Batteries Included. 90 day free replacement warranty. Unprotected.

It's not often I see a product whose designer shares my goals of original work, low price, and freedom from copy protection. Infoworld was also impressed enough to name **Homepak** a "Product of the Year." Like other products so honored, it marks the start of an important trend. For the price of a single useful program, **Home Pak** gives you three built-in applications: a word processor, a file manager, and a terminal program. All are quite usable, although their controls take some getting used to. Its control codes work more like CP/M products than a Commodore package, but it is still quite usable. Though the terminal program omits Punter, Compuserve and Midwest Term protocols, it includes the otherwise almost completely dominant X-MODEM protocol for file uploads and downloads with nearly any other microcomputer. Though the other two programs aren't as powerful as Batteries Included's **PaperClip** and **Consultant**, they are adequate for many home uses. The brief manual is also quite usable, once you learn how to make the built-in copy stand to work (fold it over backwards). The filer uses random instead of relative files, but seems to work, and uses a unique design that avoids such computer concepts as field, record and file. Although 3 of the best available programs together could far outdo **Home Pak**, they wouldn't all fit on one unprotected diskette. Nor would they sell for \$50 retail. Recommended. -JS

Word processors

SCRIPTMASTER

\$50 word processor from Master Software.

Scriptmaster is relatively easy to understand. I like both the simplicity of the menu driven format and the varied text handling features. Unfortunately, the documentation, price and a few programming lacks detract from an otherwise good program. **Scriptmaster** does not offer horizontal scrolling, and only the first 40 or 80 columns are visible in video output mode. To clear the previous screen, leave the program by hitting the RUN/STOP key and typing RUN. The cursor occasionally disappears from the screen and reappears 3-4 letters later. The documentation is meager--only 10 pages of photo-copied dot matrix type printout. Not recommended. -Todd Hill

SPELL NOW

Diskette for the 64.

Spelling checker from Cardco, 300 S. Topeka, Wichita KS 67202

A spelling checker to be used with the companion word processor **Write Now!**, the diskette contains 2 dictionaries, one of 34,000 words and the other of 1,000, plus the ability to add your own dictionaries. The large dictionary takes over 15 minutes to check a document, but the "mini" dictionary is a good small dictionary, even though it contains many words that probably don't come up in most writing. The program also allows you to view any suspected words within your text. The program doesn't check the last word of the text, doesn't have a directory pause, and the yellow-on-white screen is difficult to read. Regardless, I like the program very much and bought my own after testing it for a couple of weeks. -Jerry Dellinger

Game Reviews

Adventure games

GATEWAY TO APSHAI

cartridge for the 64.

Arcade/adventure game from Epyx. Requires joystick.

REVIEW #1: Gateway to Apshai is like Temple of Apshai, except that you don't have forever to explore each level. It is an arcade-style game of exploration that uses the joystick. Gateway offers a choice of 16 dungeon layouts, and at least 7 levels (so far!). Unlike the Temple of Apshai, none of Gateway's treasures are trash, you start out with 5 lives, and when you die, you restart at the same level, already in the dungeon. The monsters have also been revised, along with the treasures and some weapons. However, the overall strategy is still much the same. You have a maze to explore, treasures to wrest from guarding monsters, and traps to avoid. You have spells and commands to deal with all these problems, but must use them properly to survive. Two players can play the game together as a team, with one player running the joystick, and the other pressing function keys as needed. This is likely to raise your score as the game action is sometimes too hectic for a single pair of hands. It is also to your advantage to explore most of one level before going to another, especially at levels 4 and 5. However, don't feel like you have to kill everything in sight, since a few enemies are invulnerable. (A wall makes a good shield as you fight.) Recommended. -Jamie and Jim Strasma

REVIEW #2: A great adventure game for beginners. Since I'm a beginner, I like it a lot. Recommended. -K. Manuelian

Arcade games

CHAMPIONSHIP LOAD RUNNER

Arcade from Broderbund, San Rafael CA 94903

The best word to describe this game is HARD. Championship Load Runner takes up where Load Runner left off. You control a little man who climbs up ladders and platforms (a la Donkey Kong), all the while trying to elude guards. Even after numerous attempts, I couldn't get off the first screen. If you didn't get enough of the first load runner or find no challenge in it any more, you may want to try this one. I'll stand aside and watch, thank you, because I didn't enjoy playing it. -Steve McNamara

INDIANA JONES IN THE LOST KINGDOM

\$30 diskette for the 64.

Arcade from ALERT by Mindscape, Box 8334, Chicago IL 60680. DOS protected.

Ever see "Raiders of the Lost Ark?" If so, then you've heard of the daring character Indiana Jones! This program truly lives up to its name. You'll be given the choice of 6 rooms to search for that hidden treasure. There are no written rules, and that's the way Indy would want it. This is a very tough game. I've spent hours trying to win at the lowest of 3 difficulty levels. Mindscape offers a 24 hour clue hotline. Recommended for the adventurer. -Mike Stout

Strategy and simulation games

DRAGONRIDERS OF PERN

Arcade/strategy game for 1-4 players for the 64 from Epyx. Requires 1541 disk drive. Joystick required for thread-fighting. DOS protected. 90 day free replacement warranty.

In this combination game, based on Anne McCaffrey's famous fantasy science-fiction books, there are two primary tasks: thread-fighting, and negotiations. Although thread-fighting is essential to preserve the planet from invading alien organisms, negotiation is also essential to keep your thread-fighting forces fed and supplied, and to maintain needed ground support. Negotiation is no easy task, because the political leaders of the surrounding areas are jealous of their power and tend to forget the value of your services, counting instead the cost to themselves. To negotiate successfully, you use the joystick button to invite influential citizens to such ceremonial occasions as weddings and dragon hatchings. You may also give away fire lizard eggs; they are in great demand as pets. Duels are also permitted, as are conclaves and alliances. If you succeed, you earn victory points. At the end of each turn (year), your progress is shown on a chart. At apparently random but determinate times, you will go to fight thread as it falls. This part of the program is moderately interesting arcade view of a flying dragon searing falling threads with its fiery breath, without being touched by them. If any thread reaches the ground, it destroys all greenery in that area. The game ends when either 20 threads reach the ground or the number of turns selected at the start of the game have passed. A final chart shows which of 6 dragonrider "weyrs" has won the game. Recommended for intermediate strategists. -Jamie and Jim Strasma

FORTRESS

Chess-like strategy game from SSI, 883 Stierlin Rd., Bldg. "A", Mountain View CA 94043

Fortress is a strategy game in the same league as chess. The purpose of **Fortress** is to occupy more spaces than your opponent. The board has only 36 squares. You control these squares by building your castles on them, thereby controlling that square and the squares around them. A castle may be built up to 3 levels high. You destroy your opponent's castle by having one more attacking point than he has defending point. **Fortress** allows you to play against yourself, another human being or the computer. The computer can learn from its mistakes. I found **Fortress** a fun, and interesting game to play. The average game takes about 10 minutes to play and the computer can keep track of up to 30 games and results. Rules are easy to learn and excitement is excellent. The concept of your opponent learning from its mistake is outstanding. -Micky Haberek (Sprite 64)

SARGON III

Chess strategy game from Hayden, 50 Essex St., Rochelle Park NJ 07662.

Sargon III has an opening library of over 68,000 moves, and increased its playing speed in all 9 different levels. **Sargon III** allows you to use it as a chess tutor, take back moves, change sides in the middle of a game, and even suggests moves. It also allows you to save a game to disk and prints out all your moves in chess notation. I found it to play a strong game of chess, even at low levels. Moves are concise and the chess algorithm well written. However, I found ease of usage to be slightly lacking. -Micky Haberek (Sprite 64)

Hardware Reviews

Computer Aids and Accessories

JSR DOS KERNAL, by Jay Renard.

\$20 custom Kernal ROM for the 64 from JSR Enterprises, 10035 White Pine Ln., Santee CA 92071. 619/449-9748. No stated warranty.

Shortly after our review of the **Personalized Kernal** from G.C. Systems appeared, we heard from Jay Renard of the San Diego PUG. He reports "G.C. Systems is copying our kernal and calling it their own...Larry Carlson bought a DOS kernal from JSR Enterprises. One month later I downloaded this copy off a local board. This is their first attempt to sell our product as their own."

After using both products, I see a good deal of similarity in their functions, although they are not identical. I've also done some studying of the **Personalized Kernal's** code, while trying to move it to the SX-64. It omits some of the bug fixes in current Commodore ROMs, and alters a good deal more of the kernal ROM than it needs to, making me somewhat less inclined to recommend it than before.

One important difference in the JSR DOS **Kernal** version is that the DOS wedge is active at power up—you can easily disable it, but don't have to do anything to access it in the first place. I find that very convenient. One thing I intend to change about it though is that its SHIFT-RUN defaults to a relocating load from disk; a ",8,1" load would be more useful. Like the **Personalized Kernal**, the **DOS Kernal** is available in a higher cost (\$40) version that includes a stock kernal accessible at the flip of a switch for heavily protected programs. I recommend that version, as some tested programs don't like the custom-only version. Since the JSR product is less expensive than the alleged copycat product, I suggest you consider it first, and only buy the G.C. version if you need its particular features. Despite the controversy, either product is a vast improvement on the "official" kernal ROM. -JS

MINI-VAC

\$25 tool for all Commodore equipment.

Vacuum cleaner from Mini-Vac, Inc., Box 3981, Glendale CA 91201 (818/244-6777)

This miniature vacuum cleaner is designed for use on photo, stereo and computer equipment. It is powered by a 9 volt battery and works well. I use it to clean between the keys on my 64. The AC adapter can be used also for other purposes (3,4,5,6,7,8 or 12 volt). The **Mini-Vac** does a very good job at keeping dust out of equipment. Recommended. -Mike Stout

PROGRAM BOARDS

\$10 for 12 boards for the 64.

Overlay from Cooperative Design, Box 138-C, Langley WA 98260

A do-it-yourself "cheat sheet" overlay made of heavy paper. A better idea is to buy a **Leroy's Cheatsheet**, use it to draw one on paper and cut that out. Now you have the same thing at a much lower price. Sorry, but I can't think of one reason to recommend this product. -Mike Stout

Expansion memory boards, etc.

'LBOW

\$17.50 cartridge expansion board for the 64. Right angle cartridge port doubler with reset button from Turner International Enterprises, Ltd., 2061 W. Mill Rd., Milwaukee WI 53209

'**LBow** is surprisingly well made. If your main needs are to see a cartridge while it is being inserted, save wear and tear on your computer port and have a handy reset button, the '**LBow** is for you. In addition, it will allow an extra cartridge, that can be disabled by software (like **Fastload**), to remain in at all times. One caution: The '**LBow** does not have a switch to cut off power to the cartridge. Recommended if you power down before inserting cartridges. -Herb Gross

Interfaces

BI-80, 80 column cartridge for the **64**.
\$200 from Batteries Included, Richmond Hill
ONT.

As readers will remember, we've been in the process of reviewing a BI-80 card since last summer. The one we received in June failed almost immediately and on several machines, although another BI-80 card brought to our LC⁴ camp worked well so long as it was kept cool. Ours went back for repair in early July, but that was the last we heard of it until January. After our third inquiry, a new one arrived in 2 days by Federal Express.

The new BI-80 works quite well on our 64. Unlike the June '84 version, the current v2.1b works well for hours without growing unduly hot. As claimed by Batteries Included, this is a very clean 80 column display--no sparkle, jumping characters, or other detriments common to other such cards, and it is directly usable with monochrome or color monitors.

The main disadvantage for some uses is that the included Basic 4.0 uses up 8K of memory in the cartridge block. On the other hand, don't underestimate the convenience of having Basic 4. (It can also be disabled.) The other obvious factor is cost. Now that the 64 is widely available for \$150, its accessories are also having to come down in price, in anticipation of the C-128, with its standard 80 column color display. Meanwhile, the BI-80 is very worthwhile for those who use the 64 for such serious business uses as word processing and spreadsheets, so long as the product you'll use it with is compatible. Since Batteries Included makes several of the best such products, you may want to stick with their own products, all of which should work properly with the BI-80. Recommended.--JS

VIC 1011-A RS232 INTERFACE

\$50 cartridge for the **VIC** or **64**.

RS232 interface from Commodore, 1200 Wilson Dr., West Chester PA 19380. 90 day ltd. war.

The **1011-A** is one of Commodore's least-known and most useful products. It simply and reliably gives a VIC or 64 the ability to use standard MODEMS or communicate directly with any other computer equipped with an RS232 port (i.e., most of them). Although it does not come with a null MODEM switch, I was able to slip one into the case (just swap pins 2 & 3, and 6 & 29), allowing me to connect it to printers, MODEMS and other computers with equal ease. If you need to connect to an RS232 device, the 1011-A is a fine way to do it. Recommended. -JS

Networking

COMMODORE 1660 MODEM

Modem from Commodore, 1200 Wilson Dr., West Chester 19380.

This MODEM would be an excellent device, with its built-in speaker which lets you monitor a call in progress, and its touch tone dialing capabilities, if only they had [explained how to use its carrier detect feature in the manual.-ED] The MODEM itself looks nice with its sleek gray case, and all necessary cables are included for you to use it with a TV, a monitor, or even on an SX-64. -Bill Osipoff (Sprite 64)

WESTRIDGE MODEM

The Westridge modem is generally compatible with programs written for the 1650, although the unit will not work with **Blitzterm**--all signals are read as carriers. However, if you can't get a 1650, a Westridge is a good second choice. -Paul Motise (Rockville Hardcopy)

Magazine Reviews

BOZART, \$42/6 issues (2 diskettes).

Monthly disk magazine from Bozart, 100 Lee St., Jamestown NC 27202. Unprotected. No stated warranty.

Unlike other disk magazines, Bozart really is a magazine, except the articles appear on screen rather than paper. Most of each issue is a relative file accessed by a text reader program, with an occasional hires drawing to maintain interest. Personally, I have little use for this format, unless it includes a search function, because otherwise a paper magazine is easier to use; however, some may prefer its compactness. Publisher Robert Sims, a Midnite subscriber, makes many good points in the issues reviewed. If I were editing his work, I'd cut each article in half, but otherwise, he writes well. The best part of Bozart may be its examples of Assembly Language programming and related articles. Sims wrote 2 popular programs for Compute's Gazette, which only publishes meaningless rows of numbers for machine language programs. Fortunately, Sims makes source code available separately, and includes some of it in Bozart. If you'd like to sample Bozart, send them \$3, a disk, and return postage in a suitable mailer. -JS

LOADSTAR, \$10 diskette (single), \$40/6 issues, or \$70/12 issues. Monthly disk magazine from Softdisk, Shreveport LA

I found this product very easy to use. Loading instructions were explicit and the documentation better than average. I received two disks: one is the magazine, and the second is to be used to return any questions, comments, public domain programs, etc. for future issues. Included were reviews of software and hardware, informative articles, and public domain disk utilities and games. The games were interesting and the programs worked. A good but not great package. -Michael Kerry (Fox Valley 64 Users Group newsletter)

THE SLOAN REPORT, \$36/year.

Bi-monthly newsletter for all computers from Eydie Sloane, Box 561689, Miami FL 33256. 305/251-2199.

Eydie Sloane is apparently an industry gadfly who tours the country giving talks about who's winning and losing the computer hardware wars this week. Now he's branching out into a printed version, of which the reviewed issues were the first and second. My first thought on reading them was that either this guy is very famous or very presumptuous. What gave me pause was a wealth of bold "ex cathedra" pronouncements about topics few insiders truly know about, combined with a chatty in-crowd style that assumes, for example, that Commodore will send him a free C-128 system just because he said he'd like one in his newsletter.

On the other hand, he claims to know more than one person in Commodore's hardware, software, engineering, management, and marketing departments, and to have pried details about the Amiga from them. (Just what Commodore doesn't need now!) He also offers unsolicited advice to Apple, AT&T, Tandy, IBM, Commodore, and Atari. Frankly, I doubt if anyone has earned the right to offer advice to all those firms in the same month. I was also more than a little concerned about Mr. Sloane's industry knowledge, when he suggests the IBM PC is better than the AT&T 6300 because the PC has a 40K ROM and the 6300 an 8K one. Those familiar with PC's know MS-DOS computers duplicate the functions of IBM's cassette Basic in RAM with GWBASIC, and no one who has used it will assert that a ROM-based cassette-only Basic is an asset to IBM. The Sloane Report is best viewed as entertainment, not news, and of a sarcastic type I've seen much too often lately. Not recommended. -JS

Disk and cassette aids

AUTOLOAD/DIRECTORY 64

\$20 cartridge for the 64.

Disk load program from Eastern House Soft., 3239 Linda Dr., Winston-Salem NC 27106.

REVIEW #1: If you don't like fooling around with a wedge, try this cartridge. **AD-64** uses a reset button plus a single keystroke to implement its features. The only problem is that the computer resets each time these are accessed. **AD-64** has 6 features: load & run a Basic program, load & run a machine language program, load & list a directory, load a file, and system reset. I can find better uses for \$20. -Mike Stout

REVIEW #2: The only use for this is as a reset button. Only recommended if you play a lot of games you can't exit without shutting off your machine. -Nita Rybolt

MACH 5

by Bruce Carver and Kevin Homer.

\$35 fast load cartridge for the 64 from Access Software, Salt Lake City UT.

Mach 5 is another disk speedup utility similar to Epyx's **Fast Load**, that shares most of its pluses and minuses. It comes with a disk of useful programs that add 4K to BASIC and catalog diskettes. Special features include a help menu, a screen dump, and a bump killer. Advantages over **Fast Load** include: ability to use wild card characters in loading, ability to restart without powering down, screen blanking during loads for added speed, and compatibility with Access games, SX-64's, printers, and standard SAVE commands. Its main lacks are the inability to use some commands with disk units other than 8, and the lack of a built-in disk monitor. Although I dislike having anything continuously connected to my 64's cartridge port, this is a useful product. Unless you need a disk monitor, you may prefer **Mach 5** to **Fast Load**. -JS

Graphic aids

MR. PIXEL'S PROGRAMMING PAINT SET

by Master Software.

Drawing program for ages 8+ for the 64, from Mindscape, 3444 Dundee Rd., Northbrook IL 60062. Requires 1541 disk. Joystick optional. DOS-protected. 90 day media war.

Like several competing programs, **Mr. Pixel** is an icon-controlled paint program that is fairly easy to use. In addition, it is uniquely programmable—it remembers your drawing commands and allows you to edit and replicate them. Using this feature, Jamie was quickly able to design a beautiful stained glass window effect that covers the whole screen. This can be saved as background, for reuse in other Pixel programs (see below). Although **Mr. Pixel's Paint Set** is much like its best competitors, the program option makes it a better vehicle for learning than most, especially for those who can't draw well free-hand. It emphasizes logical thought and planning instead of fine motor skills, and is well described in a good-sized manual. A good addition to any elementary school program library. -JS

MR. PIXEL'S CARTOON SET

by Master Software (same as above).

Compared to **Movie Maker** (see M#23), **Mr. Pixel's Cartoons** are quite simple. However, they are also vastly easier to design, and far more suitable for use by children. Like its fancier competitor, **Cartoon** allows you to program an animated scene, incorporating several actors and props and a background imported from **Mr. Pixel's Paint Set**. To help you get started, 1 of 3 ready-made cartoons plays each time you start the program. These may be edited, or new cartoons created from scratch. Each cartoon can have 10 players, with 3 active at any one time. Players can be created or "borrowed" from finished cartoons, with the

help of the large and helpful manual. Nine year old Jamie had no trouble at all putting this program through its paces, and the results are impressive even to adults. Like its companion Mr. Pixel programs, **Cartoons** is a fine way to introduce children to logical thought and planning, and helps them understand the work behind their Saturday morning favorites. Highly recommended. -JS

Music and Sound aids

BANKSTREET MUSICWRITER

Music program for the 64, from Mindscape, 3444 Dundee Rd., Northbrook IL 60062. Needs 1541. DOS-protected. 90 day media war.

REVIEW #1: The manual is a regular book, thick because an entire section is devoted to a music tutorial. After a half hour's reading, I found myself not only transposing music, but writing my own. **Music Writer** has several features superior to those of Electronic Arts' **Music Construction Kit**—namely, the thirty-second note, two dynamic settings, a first and second ending, a repeat sign, and triplets. Secondly, **Music Writer** is run completely from the keyboard, whereas **M.C.K.** needs a joystick. Finally, **Music Writer** prints music in staves, while **M.C.K.** prints music in one continuous line. One nice addition would be to make it possible to transpose keys. Another would be to write in a particular time signature. Overall, I found the **Bank Street Music Writer** a plus over most music processors. -Jim Chasteen

REVIEW #2: This is even better for students than **Master Composer**. The manual is great, much better than **Music Composer**, because you can find what you're looking for and the directions are very clear. Jamie ran the program very easily, following the manual without trouble. When used after music class, it should reinforce the note system and the do-re-mi system to construct your own songs, as well as reinforcing fraction math skills and help teach note lengths (timing). We had trouble getting the time signature. Great combination of music and math for creating your own music. -Geneva Spencer

VOICE MASTER

\$90 cartridge, microphone & diskette for 64. Voice synthesizer from Covox, Inc., 657-D Conger St., Eugene OR 97402

Thanks to **Voice Master**, your own programs can talk using your own voice, or **Voice Master** will make sounds, noise, music or even sing. It's all as easy as typing "SPEAK," without having to phonically spell words. The cartridge and microphone are needed only to record vocabulary files to be used in a "talking" program. Once you have written a program, you can give it to a friend to enjoy, and Covox even encourages you to market your own original programs that use their speech synthesizer. The diskette includes a program which will duplicate a machine language version of **Voice Master** onto your diskettes.

Voice Master expands BASIC to include ten new commands: **LEARN**, **SPEAK**, **SPEED** (causes words to sound faster or slower), **RATE** (determines at which speed your sounds are digitized), **VOLUME**, **PUT** (saves vocabulary to disk), **FIND** (load into memory), **CLEAR**, **SCREEN** and **PAUSE**. The unusual power of **Voice Master** is the **LEARN** command. To record a word, phrase, noise, etc., simply type **LEARN** 0 (any number up to 63 will work) and press **RETURN**, and speak into the microphone. The other commands are just as easy to use. **PUT** and **FIND** can be used within a program. **Voice Master** is far and away the easiest to use speech synthesizer I've tried. The program diskette comes with 4 example programs (Demo, Greeting, Calculator and Clock) that demonstrate **Voice Master's** power and serve as a reference for your own programs.

Voice Master is easy to use and versatile. Each sound is digitized (converted into number values the computer can recognize), stored and recalled when your program **SPEAKs**. Since this can give a raspy quality to the sounds, the more precisely you form your words, phrases, etc., the better the reproduction will be. Compared to other popular speech synthesizers, I found **Voice Master** the easiest to recognize. The sound quality, plus the ease of entry and unlimited sized vocabulary the program can use makes this an outstanding buy. -Gary Fields

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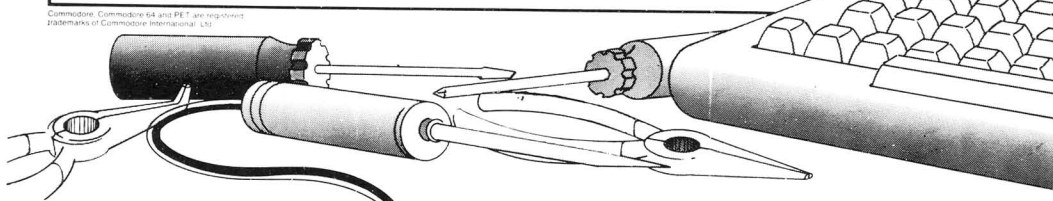
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